



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/205,653    12/03/98    ELDERING

C    8887.3003

027832  
EXPANSE NETWORKS, INC.  
300 NORTH BROADSTREET  
DOYLESTOWN PA 18901

TM02/0619

EXAMINER

LE, U

ART UNIT

PAPER NUMBER

2171  
DATE MAILED:

06/19/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
09/205,653

Applicant(s)  
Eldering et al

Examiner  
Uyen Le

Art Unit  
2171



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Apr 9, 2001
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 20-51 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 9 20) ☐ Other:

**DETAILED ACTION**

***Response to Amendment***

1. Applicant's amendments to claims 46, 47 are acknowledged. Consequently, rejection to claims 46, 47 under 35 U.S.C. 112, second paragraph is withdrawn.

2. Applicant's arguments have been fully considered but they are not persuasive. Applicant also seems to argue the claims as amended.

Applicant argues that the viewer profile in Williams is nothing more than a compilation of data and there is no reason to apply rules in order to generate the profile as recited claim 20. In response, Williams clearly teaches the concept of rules for generating viewers profiles when Williams shows that user profile database 800 tracks users preferred channels, volume, program genre information, whether to block content information and whether supplemental programming is requested with a particular channel (see Figure 8, column 5, lines 52-64). The claimed rules merely read on the fact that the system of Williams identifies the genre watched. If the viewer is detected as viewing most of the time cartoons, evidently the system would create a profile of a child so that next time that viewer is watching, advertisements such as cereal and toys are presented (see column 6, lines 40-49).

Applicant argues that there is no disclosure or suggestion of a profile having probabilistic measures of earnings, age or other profile type data. In response, the claimed profile having probabilistic measures merely reads on the fact that depending

on the genre watched, the system of Williams establish a profile for the viewer for example deciding whether a child or an adult is watching a program.

Applicant argues that the system of Williams already knows the users and their preferences, there is no need to apply rules to further define a profile of the user. Applicant cites column 10, line 26- column 11, line 21 of Williams as support. In response, the cited columns represent only one embodiment of Williams' invention. Before a user can be recognized by the system of Williams, clearly profiles using rules had to be applied in order to correlate programs to viewers for example viewers watching news are likely to be adults, viewers watching cartoons are likely to be children. Since in the system of Williams, advertising is presented to targeted viewers, clearly rules had been used to identify viewers and create profiles. Furthermore, since the system of Williams updates profiles and identifies new users, clearly rules are being applied in order to recognize new viewing patterns (see Figure 2, column 8, lines 14-24, column 9, lines 11-16).

Regarding claims 21, 22, 23, Applicant argues that Williams does not retrieves heuristic rules of time duration, volume level and demographics. In response, Williams clearly discloses time duration, volume level and demographics information used to create profiles (see column 6, lines 10-18, column 7, lines 20-25, column 6, lines 40-44). Although Williams does not explicitly mention retrieving heuristic rules as claimed, it would have been obvious to one of ordinary skill in the art to do so in order to correlate viewers to programs watched and create appropriate profiles for example adults or children.

Applicant presents no further arguments. For all the reasons discussed above, rejection to all claims 20-51 is maintained using the reference of record.

***Claim Objections***

3. Claims 39-47 are objected to because of the following informality: claim 39, line 10 has a typographical error. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 20, 26, 28-31, 39, 43, 45-51 are rejected under 35 U.S.C. 102(e) as being anticipated by Williams et al (US 5,977,964) of record.

Regarding claim 20, Williams discloses a method for generating a subscriber profile vector including all the claimed features. Note

- The claimed “monitoring subscriber viewing activities including requests for source material initiated by the client side” is met when Williams shows that the system monitors viewer’s selection of channels and stations (see column 8, lines 25-40)
- The claimed “generating subscriber selection data, wherein the subscriber selection data corresponds to a record of the monitored subscriber viewing

activities" is met when the system records which programs have been selected over time (see column 15, line 64- column 16, line 2)

- The claimed "retrieving source related information corresponding to the requested source material" is met when the system gathers and stores information related to the programs selected (see Figure 8)
- The claimed "retrieving heuristic rules associated with the source related information" is met when Williams shows that the system correlates program watched to genre and build a profile for the viewer (see column 5, lines 52-64)
- The claimed "processing the subscriber selection data with respect to the source related information and the heuristic rules to generate the subscriber profile vector" and "storing the subscriber profile vector" are met when the system generates and stores viewers' profiles identifying adults and children (see Figures 7, 8).

Claim 31 merely recites a system to perform the method of claim 20 with the added limitations of means for transmitting a subscriber request for source material, means for generating a program characteristic vector based on the source related information. Such means are clearly present in the system of Williams to submit users inputs (see column 8, lines 25-32) and to associate information of genre and stations to programs as shown in Figure 8. Furthermore, clearly, a set of heuristic rules is retrieved in order to build and update a viewer's profile and to identify new viewers (see column 2, lines 11-21, column 9, lines 11-16).

Regarding claim 39, Williams discloses all the claimed subject matter. The claimed "means for selecting source material for a subscriber to view" is met when Williams shows that depending on a recognized viewer, the system presents appropriate advertisements (see column 6, lines 40-44). The claimed "means for monitoring subscriber activity including means for receiving the subscriber selections for source material, means for recording the subscriber selections for source material, wherein a record of the selections constitutes subscriber selection data" are met when the system allows viewers to select programs and monitors which programs have been selected in order to create viewers profiles (see column 5, lines 60-64). The claimed "means for retrieving source related information, wherein the source related information includes descriptive fields corresponding to the source material, means for retrieving a set of heuristic rules associated with the source related information and means for processing the subscriber selection data with respect to the descriptive fields and the heuristic rules to generate the subscriber profile vector and means for storing the subscriber profile vector" are met when the system retrieves the channels, program genres of selected programs to generate the viewer preferences and store them in viewers profiles (see Figures 7, 8).

Regarding claim 48, Williams discloses an Internet browsing system (see column 5, lines 29-34) including input device for allowing a subscriber to select source material to view (see column 8, lines 25-40), a monitor for displaying the selected source material (see Figure 1), and a profile generator for generating a profile of the subscriber based on the selected source material and a set of heuristic rules associated with the

selected source material when Williams shows that profiles are generated based on the program viewed which are correlated to genres (see Figures 7-9, column 5, lines 60-64, column 6, lines 50-52).

Regarding claim 26, the claimed "wherein said retrieving source related information includes context mining of textual information associated with the requested source material" merely reads on the fact that the system of Williams identifies a genre of programming for presenting programs according to current viewer's genre preferences (see column 7, lines 39-58).

Regarding claim 28, Williams discloses retrieving source related information from an electronic program guide associated with the requested source material (see column 7, lines 31-35).

Claim 29 merely reads on the fact that the system of Williams monitors a viewer's activities such as muting or interrupting advertisements (see column 7, lines 2-6).

Claim 30 merely reads on the fact that the system of Williams monitors viewers' activities over time (see Figure 8, column 6, line 50- column 7, line 19).

Regarding claim 43, the claimed "wherein said generating subscriber selection data includes context mining of textual information associated with the selected source material" merely reads on the fact that the system of Williams identifies a genre of programming for presenting programs according to current viewer's genre preferences (see column 7, lines 39-58).



Regarding claim 45, Williams discloses retrieving source related information from an electronic program guide associated with the selected source material (see column 7, lines 31-35).

Claim 46 merely reads on the fact that the system of Williams monitors a viewer's activities such as muting or interrupting advertisements (see column 7, lines 2-6).

Claim 47 merely reads on the fact that the system of Williams monitors viewers' activities over time (see Figure 8, column 6, line 50- column 7, line 19).

Regarding claim 49, Williams discloses a profile generator including "means for tracking subscriber selections for source material, means for retrieving the source material" (see column 8, lines 25-40). The claimed "means for generating a content characteristics vector based on the source material and means for processing the subscriber selection with respect to the content characteristics vector and the set of heuristic rules to generate the subscriber profile" are clearly present in the system of Williams in order to build and update viewers profiles (see Figure 8), and to identify new viewers (see column 2, lines 11-21, column 9, lines 11-16).

Regarding claim 50, Williams discloses a profile generator including "means for monitoring subscriber activity, means for generating viewing habits information from the subscriber activity" (see 8, lines 25-40, column 5, line 52- column 7, line 19). The claimed "means for generating a viewer characteristics profile based on the viewing habits information and the set of heuristic rules" are clearly present in the system of Williams in order to generate viewers profiles as shown in Figure 8 and to recognize new viewers (see column 9, lines 11-16).

Regarding claim 51, clearly the profile generator includes "means for monitoring subscriber activity including recording subscriber selections for source material, means for retrieving the source material" (see column 8, lines 25-40, column 5, lines 60-64), and "means for generating the subscriber profile (see Figure 8).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 21-25, 27, 32-38, 40-42, 44, are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams et al (US 5,977,964) of record.

Regarding claim 21, Williams discloses monitoring time duration corresponding to the viewing times of the requested source material when Williams shows that the system correlates programs viewed at a certain time with genre (see column 16, lines 10-18). Although Williams does not explicitly show retrieving heuristic rules associated with monitored time duration, it would have been obvious to one of ordinary skill in the art to do so in order to correlate time viewed with probable viewer for example viewers watching programs for long periods of time during the day are likely to be adults.

Regarding claim 22, Williams discloses monitoring volume levels and retrieving (see column 7, lines 20-25, Figure 8). Although Williams does not explicitly show retrieving heuristic rules associated with monitored volume levels, it would have been

Art Unit: 2171

obvious to one of ordinary skill in the art to do so in order to correlate the preferred volume to specific viewers in order to identify older people for example.

Regarding claim 23, the claimed "subscriber profile vector includes household demographic data indicating probabilistic measurements of household demographics" merely reads on the fact that the method of Williams identifies adults and children using the system in order to present appropriate advertisements (see column 6, lines 40-44). Although Williams does not explicitly show that the heuristic rules define probabilistic measures of demographics associated with subscribers viewing the source material, it would have been obvious to one of ordinary skill in the art to include such features in order to create a profile for targeting viewers for advertising purposes.

Regarding claim 24, the claimed "subscriber profile vector includes household program preference information indicating probabilistic measurements of household program interests" is met when the method of Williams monitors viewing habit of different viewers in a household to adjust the system setting accordingly (see column 6, lines 25-49). Although Williams does not explicitly show that the heuristic rules define probabilistic measures of program interests associated with subscribers viewing the source material, it would have been obvious to one of ordinary skill in the art to include such features in order to correlate program genres to viewers.

Regarding claim 25, the claimed "wherein the subscriber profile vector includes household product preference information indicating probabilistic measurements of household product interests" merely reads on the fact that the viewers' profiles in the method of Williams determine which commercials are muted, interrupted or liked by

viewers of a household (see column 7, lines 2-10). Although Williams does not explicitly show that the heuristic rules define probabilistic measures of product interests associated with subscribers viewing the source material, it would have been obvious to one of ordinary skill in the art to include such features in order to identify who is likely to be interested in which product in order to advertise accordingly.

Regarding claims 27, 44, although Williams does not specifically show that the textual information is closed-captioning data, Williams explicitly shows that the viewer can set closed-captioning on/off preference (see column 6, lines 50-63). Furthermore, Williams shows that programs are searched by keywords (see Figure 4). Therefore, it would have been obvious to one of ordinary skill in the art to include text of closed-captioning data while implementing the method taught by Williams in order to allow identification of viewers' preferred programs by keywords related to the closed-captioning data.

Claims 32-35 correspond respectively to a system for method claims 21-24, thus are rejected for the same reasons stated in claims 21-24 above.

Regarding claim 36, Williams discloses a data processing system for generating a household demographic characteristics vector in a client-server based architecture (see Figures 6-8). The claimed "means for allowing a subscriber to request source material", "means for monitoring subscriber activity", "means for generating household viewing habits", "means for retrieving a set of heuristic rules", and "means for storing the household demographic characteristics vector" are clearly present in the system of Williams in order to monitor viewers' activities, submit requests to the host, recognize

Art Unit: 2171

specific viewers and build viewers' profile database (see column 3, line 5- column 8, line 40). Although Williams does not explicitly show the claimed "means for processing the subscriber selection data with respect to the set of heuristic rules and the household habit information to generate the household demographic characteristics vector", clearly the system of Williams is used by a variety of users since it monitors viewers' activities and detect new viewers. Therefore, it would have been obvious to one of ordinary skill in the art to include the claimed features in order to provide appropriate programs and advertisements to viewers depending on their household habit.

Claim 37 merely reads on the fact that the system of Williams monitors a viewer's activities such as muting or interrupting advertisements (see column 7, lines 2-6).

Claim 38 merely reads on the fact that the system of Williams monitors viewers' activities over time (see Figure 8, column 6, line 50- column 7, line 19).

Regarding claim 40, the claimed "subscriber profile vector includes household demographic data indicating probabilistic measurements of household demographics" merely reads on the fact that the system identifies adults and children using the system in order to present appropriate advertisements (see column 6, lines 40-44). Although Williams does not explicitly show that the heuristic rules define probabilistic measures of demographics associated with subscribers viewing the source material, it would have been obvious to one of ordinary skill in the art to include such features in order to create a profile for targeting viewers for advertising purposes.

Regarding claim 41, the claimed "subscriber profile vector includes household program preference information indicating probabilistic measurements of household

program interests” is met when the system of Williams monitors viewing habit of different viewers in a household to adjust the system setting accordingly (see column 6, lines 25-49). Although Williams does not explicitly show that the heuristic rules define probabilistic measures of program interests associated with subscribers viewing the source material, it would have been obvious to one of ordinary skill in the art to include such features in order to correlate program genres to viewers.

Regarding claim 42, the claimed “wherein the subscriber profile vector includes household product preference information indicating probabilistic measurements of household product interests” merely reads on the fact that the viewers’ profiles in the system of Williams determine which commercials are muted, interrupted or liked by viewers of a household (see column 7, lines 2-10). Although Williams does not explicitly show that the heuristic rules define probabilistic measures of product interests associated with subscribers viewing the source material, it would have been obvious to one of ordinary skill in the art to include such features in order to identify who is likely to be interested in which product in order to advertise accordingly.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hertz et al (US 5,754,938) teach a pseudonymous server for customized electronic identification of desirable objects.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 2171

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

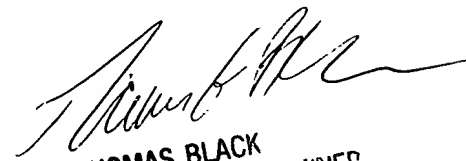
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uyen T Le whose telephone number is 703-305-4134. The examiner can normally be reached on M-T 7:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 305-9707. The fax phone numbers for the organization where this application or proceeding is assigned is 308-9051 for all communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 305-9000.

UL  
June 15, 2001

  
THOMAS BLACK  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2110